

In the Claims:

1. (Canceled)

2. (Cancelled).

3. (Currently Amended) The fuel cell apparatus as claimed in claim 7 [[1]], wherein the fuel heating means is adapted to heat ~~heats~~ the fuel to the temperature at which the vapor pressure of the fuel is below a holding pressure determined by the [[a]] pressure holding valve.

4. (Currently Amended) The fuel cell apparatus as claimed in claim 7 [[1]], wherein the air feed means includes an air heater.

5. (Currently Amended) The fuel cell apparatus as claimed in claim 4, wherein the air heater is adapted to heat ~~heats~~ the air to a temperature at which condensation of the fuel in the swirl chamber does not occur.

6. (Currently Amended) The fuel cell apparatus as claimed in claim 7 [[1]], wherein the air feed is adapted to supply ~~supplies~~ air continuously.

7. (New) A fuel cell apparatus with a reformer and a mixture formation means for mixing fluids prior to entering a reaction space, said mixture formation means comprising:

a mixture formation area including a swirl chamber;

an air feed means for supplying air to the mixture formation area;

a fuel line including a fuel heating means for heating fuel in the fuel line and a nozzle having an outlet and being connected to the mixture formation area to supply heated fuel from the fuel line to the swirl chamber, wherein the fuel heating means preheats the fuel to a temperature that produces spontaneous fuel vaporization at the outlet of the nozzle; and

a fuel feed means connected to a fuel source for feeding fuel between the fuel source and the fuel line, wherein the fuel feed means includes a supply line, a return line, and a pressure

impulse injection means for selectively supplying fuel from the supply line to either the fuel line or the return line,

wherein the supply line includes a fuel pump having a pumping pressure, and the return line includes a pressure holding valve having a holding pressure, wherein the pumping pressure is matched to the holding pressure, and

wherein the pressure impulse injection means includes a changeover valve having an input side connected to the fuel pump and an output side that is selectively connectable with the fuel source via the return line and the mixture formation area via the fuel line such that the changeover valve directs fuel from the fuel pump to either the fuel line or the fuel source.